

ABSTRACT

A transistor-outline TO-can type optical module includes a stem, a sub-mount arranged in the stem and a laser diode (LD) is mounted in the sub-mount. A photo diode (PD), which has an inclined light incident surface, converts light emitted from the LD to current. A plurality of leads is extended through the stem while electrically being connected to the sub-mount. The inclined light incident surface of the PD permits that sufficient monitoring of photocurrent can be obtained and a p-side up bonding of a p-type electrode is allowed. Thus, the SMSR of the LOB is increased. A bias-tee is built in the TO-can to reduce heat caused by DC current and to increase opto-electric efficiency while suppressing an increase in the temperature of an LD chip.